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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
QURESHI, SHABANA	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/746,484	VAID, RAHUL R.	
	Examiner	Art Unit	
	Shabana Qureshi	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 23* is/are rejected.

7)☒ Claim(s) *21 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/15/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-23 rejected under 35 U.S.C. 102(e) as being anticipated by Haller et al. (US Patent No. 6,804,558).

In regard to claims 1 and 18, Haller teaches an apparatus for aggregating device communications, the apparatus comprising:

- a body (see figures 1 and 2 and relevant text; column 14, lines 39-54);
- a plurality of local ports, each local port configured to establish bi-directional data communications with a local device, and each local port using a different communication protocol (column 23, lines 30-35);
- a remote access port, the remote access port configured to establish bi-directional wireless data communications with a service provider (column 8, lines 8-15; column 18, 21-37); and
- a processing system for converting data signals between a form adapted to one of the plurality of local ports and a form adapted to the remote access port (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41).

As to claim 2, Hallerton teaches the apparatus of claim 1, the processing system further comprising a port processing unit that converts data signals between a form adapted to more than one of the plurality of local ports into a form adapted to a multiple access air interface of the remote access port (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41).

As to claim 3, Hallerton teaches the apparatus of claim 1, the processing system further comprising a shared signal processing unit that converts data signals between a form adapted to more than one of the plurality of local ports into a form adapted to a single channel of the remote access port (column 23, line 47 – column 24, line 28).

As to claim 4, Hallerton teaches the apparatus of claim 1, wherein the body is shaped and sized to be worn by a person (see figures 1 and 2 and relevant text).

As to claim 5, Hallerton teaches the apparatus of claim 1 wherein the plurality of local ports include at least one of a Bluetooth port, a HomeRF port, an IrDA port, a wireless Ethernet port, a wired serial port, a wired parallel port, or a wireless local area network port (column 23, lines 30-45).

As to claim 6, Hallerton teaches the apparatus of claim 1 wherein the remote access port includes a wireless port (column 18, lines 38-61).

As to claim 7, Hallerton teaches the apparatus of claim 6 wherein the wireless port includes at least one of a CDMA port, a TDM port, a GSM port, a PCS port, or a third generation cellular telephony port (column 8, lines 42-56).

As to claim 8, Hallerton teaches the apparatus of claim 1, the service provider connected in a communicating relationship with the remote access port through an air interface establishing bi-directional wireless data communications with the remote access port, and the

service provider including an Internet connection, whereby a local device connected in a communicating relationship with one of the plurality of local ports may communicate through the Internet (column 19, lines 11-16).

As to claim 9, Hallerton teaches the apparatus of claim 1 further comprising a local device connecting in a communicating relationship with one of the plurality of local ports, the local device including at least one of a personal digital assistant, a notebook computer, a laptop computer, a cellular phone, a palm computer, or a wearable computer (column 8, lines 42-56).

As to claim 11, Hallerton teaches the apparatus of claim 1, the remote access port including a plurality of data channels, the bi-directional wireless data communications being distributed among two or more of the plurality of data channels (column 42, lines 48-63).

As to claim 12, Hallerton teaches the apparatus of claim 1 wherein the body is at least one of a portable accessory, a modular add-on device, or a base station accessory (see figures 1, 2, 3 and relevant text).

As to claim 13, Hallerton teaches the apparatus of claim 1, the processing system further comprising one or more processors that convert traffic between data for more than one of the plurality of local ports and data for a logical channel of the remote access port (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41).

As to claim 14, Hallerton teaches the apparatus of claim 1, the processing system further comprising one or more processors that convert traffic between data for more than one of the plurality of local ports and data for a plurality of logical channels of the remote access ports (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41).

As to claim 15, Hallerton teaches the apparatus of claim 1 further comprising a services unit that provides network services to the plurality of local ports (column 6, lines 50-62).

As to claim 16, Hallerton teaches the apparatus of claim 15, the network services including at least one of device connectivity, error detection and correction, load balancing, caching, traffic management, congestion control, file sharing, printer sharing, and distributed computing (column 18, line 16 – column 19, line 10).

As to claim 17, Hallerton teaches the apparatus of claim 1 wherein the plurality of local ports comprise a terminal port cluster, the terminal port cluster including a plurality of connectors, each connector adapted to removably receive a modular device port, the modular device port adapted to a single communications technique (column 14, lines 39-54).

As to claim 19, Hallerton teaches a method for aggregating device communications, the method comprising:

- receiving local data from a plurality of local devices (column 23, lines 30-35);
- converting the local data into converted local data, the converted local data having a form suitable for transmission over a wireless communication link (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41);
- transmitting the converted local data over the wireless communication link (column 18, lines 38-61);
- receiving network data from a service provider over the wireless communication link (column 19, lines 11-16);

- converting the network data into converted network data, the converted network data having a form suitable for transmission to one or more of the plurality of local devices (column 41, lines 50-67); and
- transmitting the converted network data to one or more of the plurality of local devices (column 41, lines 50-67).

As to claim 21, Hallerton teaches the method of claim 19 wherein converting the local data includes sequentially converting the local data from selected ones of the plurality of local devices (column 12, lines 9-40; column 29, lines 15-29).

As to claim 22, Hallerton teaches the method of claim 19 wherein converting the local data includes prioritizing the plurality of local devices and converting data from a selected one of the plurality of local devices according to a priority of the selected one of the plurality of local devices (column 12, lines 9-40; column 29, lines 15-29).

As to claim 20, Hallerton teaches the method of claim 19 wherein converting the local data includes multiplexing (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41) the local data into a plurality of data streams corresponding to more than one channel of a multiple access wireless interface (column 42, lines 48-63).

As to claim 23, Hallerton teaches an apparatus for aggregating device communications, the apparatus comprising:

- a wearable body (see figures 1 and 2 and relevant text; column 14, lines 39-54);
- a plurality of local ports, each local port configured to establish bi-directional data communications with a local device, and each local port using a different communication protocol (column 23, lines 30-35);

- a remote access port, the remote access port configured to establish bi-directional wireless data communications with a service provider (column 8, lines 8-15; column 18, 21-37);
- a processing system for converting data signals between a form adapted to one of the plurality of local ports and a form adapted to the remote access port (column 8, lines 19-25; column 12, lines 28-40; column 15, lines 27-41); and
- a services unit that provides network services to one or more local devices connected to the plurality of local ports (column 6, lines 50-62).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hallerton et al. (US Patent No. 6,804,558). in view of Fan et al. (US Patent No. 5,815,126).

In regard to claim 10, Hallerton teaches the apparatus of claim 9, but does not teach that the wearable computer includes at least one of a wearable eyeglass computer or a wearable audio computer. However, Fan et al. teaches a wearable computer including a wearable eyeglass computer and a wearable audio computer (abstract, column 3, lines 4-30). It would have been obvious at the time the invention was made to modify Hallerton to include a

wearable eyeglass computer or a wearable audio computer to provide the advantage of allowing the user to see or hear voice or video data, which Hallerton seeks to do as shown in column 42, line 64 – column 3, line 10.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shabana Qureshi whose telephone number is (571) 272-3990. The examiner can normally be reached on Monday - Thursday, 9:30 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shabana Qureshi
Examiner
Art Unit 2155

SQ
November 24, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER